



### Stilgebauer Award 2010 – Application Form

Please provide the information below. This application form needs to accompany the Project Summary for the project to be considered for a Stilgebauer award. Individuals or teams may complete the required information for their own project(s) or for another teacher or group's project

Project Name: C3 (CLOUD COMPUTING COLLABORATING)	
School Regional Area	<input type="checkbox"/> North Cook <input type="checkbox"/> South Cook <input checked="" type="checkbox"/> West 40
District Name	WESTCHESTER
District No.	92.5
Name(s)-Teams with up to 5 members will be accepted! Include all names.	Email Address(s)
* JOHN TOMCZAK	* jtomczak@sd925.org
*	*
*	*
*	*
*	*
School Name	WESTCHESTER MIDDLE SCHOOL
School Street Address	1620 NORFOLK
School City, State, Zip	WESTCHESTER, IL 60154
School Phone Number	708-450-2735
If you are providing information to nominate another teacher or group, please provide your information below (if different from those named above).	
Nominator's Name	David Hill
Nominator's Phone #	708-450-2700
Best Contact Time	8:00 AM - 4:00 PM
Nominator's Email	dhill@sd925.org

Please attach the Project Summary to this form and send to Learning Technology Center One Central at 2701 W. Washington Blvd., 2<sup>nd</sup> Floor, Bellwood, IL 60104

## **Stilgebauer 2009 Submission**

### **Title: C3 (Cloud Computing Collaborating)**

John Tomczak, Math

Westchester Middle School, Westchester, Illinois

**Project Abstract:** The objective of the lesson was to encourage students to learn how to accurately gather data and represent that data in table form and in several graphical forms. One of the key technology components of the project was Google Docs. Google Docs allowed the teacher to set up a class spread. All the students in the class were able to develop their tables and graphs by simultaneously accessing the class spreadsheet. Students learn how to collaborate using an internet server and free Google docs.

**Grade Level:** 8

**Subject Area:** Math, Technology

**Technology Resources:** Computers, Internet Access, Google Docs

**Other Materials Used:** Student Exercise math sheets

### **Illinois State Standards/Math**

**State Goal 6: Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, and division), patterns, ratios and proportions.**

C. Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.

6. C.3a Select computational procedures and solve problems with whole numbers, fractions, decimals, percents and proportions.

**State Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.**

A. Describe numerical relationships using variables and patterns.

8.A. 3b Solve problems using linear expressions, equations and inequalities.

B. Interpret and describe numerical relationships using tables, graphs and symbols.

8. B.3 Use graphing technology and algebraic methods to analyze and predict linear relationships and make generalizations from linear patterns.

### **Social Emotional Standards**

Goal 2: Use social-awareness and interpersonal skills to establish and maintain positive relationships.

A: Recognize the feelings and perspectives of others.

### **NETS Standards**

#### **2. Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

#### **3. Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information.

#### **4. Critical Thinking, Problem Solving, and Decision Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

### **5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

### **6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems, and operations.

**Process:** Teacher set up the students in Google docs with their accounts. Students sign a contract to use this account responsibly. Students then did 10 trials of a favorite exercise of their choosing. Teacher asked them to create a bar graph and a line graph representing their individual results. During the process, they were able to click on the tabs of their classmates Google Docs (Excel version) and see what their classmates were doing. Thus, they were able to collaborate on ideas for improving each other's graphs and solutions to the problems

**Integration:** Students had the advantage of being able to work on their portion of the spreadsheet while collaborating and viewing other students' work. Each student could view every other student's progress by simply clicking on the other student's named tab at the bottom of the spreadsheet (see below). Students could not alter each other's work; they had 'view only' privileges. This collaboration encouraged the students to create the best tables and graphs because creative ideas i.e., coloring the graphs or shading the table data, spread virtually throughout the class in minutes.

**Reflection:** As the teacher, I was able to view all the students' work from my computer as it was being developed. If I saw a student was going off in the wrong direction, I could immediately approach them and suggest corrections to their data table or graphs. As the instructor, I have 'edit' privileges of all the students' spreadsheets. This is a great feature because it allowed me to make corrections to their spreadsheets from *my computer* and then turn control back over to them so they could continue working.